

PATENT

Atty Docket No.: 10010485-2

App. Ser. No.: 09/994,635

IN THE CLAIMS:

Please find below a listing of all of the pending claims. The statuses of the claims are set forth in parentheses.

1. (Currently Amended) A computer readable medium on which is embedded a computer program, the computer program comprising:

accessing a remote registry storing a list of description files, each description file being customized for a particular service provided by a computer and describes a pattern of message exchanges expected to be followed and documents types expected to be used for communicating with the computer to utilize the service;

identifying a description file from the list of description files corresponding to a desired service, wherein a service provider providing the desired service published the description file for the desired service in the remote registry;

retrieving an identification of the description file, a location of the description file or the description file from the remote registry,

wherein the description file includes

a plurality of interactions describing a plurality of messages to be received and/or transmitted to use the desired service; and

at least one transition identifying the order of executing said plurality of interactions,

the at least one transition including a source interaction of said plurality of interactions and a destination interaction of said plurality of interactions,

said source interaction being executed prior to said destination interaction,

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said source interaction specifying a document type to be used in the source interaction; and

using the desired service by directly exchanging messages with the service provider providing the desired service, wherein the messages are described in the plurality of interactions in the description file, and the message exchanging is in the order specified in the at least one transition, and executing the source interaction of the plurality of interactions comprises determining whether a document is an instance of the document type to be used in the source interaction; and executing the source interaction in response to the document being an instance of the document type.

2. (Original) The computer program of claim 1, wherein each of said plurality of interactions describes transmitting a message of said plurality of messages and/or receiving a message of said plurality of messages.

3. (Original) The computer program of claim 2, wherein at least one interaction of said plurality of interactions is configured to select one message to be received or transmitted from a set of messages, said set of messages being included in said plurality of messages.

4. (Original) The computer program of claim 3, wherein said plurality of messages are XML documents.

5. (Canceled)

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6. (Previously Presented) The computer program of claim 1, wherein said at least one transition includes a triggering message of said plurality of messages, said triggering message invoking execution of said source interaction.

7. (Canceled)

8. (Previously Presented) The computer program of claim 1, wherein said at least one transition includes a default transition, said source interaction being executed when a message included in said source interaction that does not otherwise have a defined transition is received.

9. (Original) The computer program of claim 1, wherein said plurality of interactions describe a plurality of message types for said plurality of messages.

10. (Original) The computer program of claim 9, wherein said message types are schemas.

11. (Original) The computer program of claim 10, wherein said schemas are XML schemas.

12. (Original) The computer program of claim 11, wherein said plurality of interactions include a location or a unique name for said XML schema.

13. (Original) The computer program of claim 12, wherein said location or said unique name includes a URL or a URN.

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14. (Currently Amended) A computer comprising:

a conversation controller generated from a description file,

wherein the computer is operable to

access a remote registry storing a list of description files, each description file being customized for a particular service provided by a computer and describes a pattern of message exchanges expected to be followed and documents types expected to be used for communicating with the computer providing the service to utilize the service;

identify the description file from the list of description files corresponding to a desired service, wherein a service provider providing the desired service published the description file for the desired service in the remote registry; and

retrieve an identification of the description file, a location of the description file or the description file from the remote registry; and

using the desired service by directly exchanging messages with the service provider providing the desired service, wherein the messages exchanged include the pattern of message exchanges expected to be followed and documents types expected to be used as described in the description file for the desired service,

said conversation controller being operable to perform a sequence of interactions described in said description file,

said sequence of interactions includes at least one of receiving messages and transmitting messages; and

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said description file including a document type for each interaction, the document type specifying a document to be used in the interaction,

wherein said conversation controller is operable to determine whether a document is an instance of a document type for an interaction of said interactions and is operable to execute the interaction in response to the document being the instance of the document type for the interaction.

15. (Original) The computer of claim 14, wherein at least one interaction of said sequence of interactions is configured to select one message to be received or transmitted from a set of messages.

16. (Original) The computer of claim 14, wherein said messages are XML documents.

17. (Original) The computer of claim 14, further comprising at least one transition describing said sequence of interactions, said at least one transition including a source interaction of said interactions and a destination interaction of said interactions, said source interaction being executed prior to said destination interaction.

18. (Original) The computer program of claim 17, wherein said at least one transition includes a triggering message of said messages, said triggering message invoking execution of said source interaction.

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19. (Currently Amended) A computer comprising:

a web service,

wherein said computer is connected to a remote registry storing a plurality of description files, each description file being customized for a particular service provided by a computer and describes a pattern of message exchanges expected to be followed and documents types expected to be used for communicating with the computer providing the service to utilize the service,

said computer comprising the web service configured to

access the remote registry; and

publish a description file in the remote registry, wherein the description file describes a pattern of message exchanges expected to be followed and documents types expected to be used for communicating with the computer to utilize the web service;

said computer comprising the web service configured to communicate directly with another computer that retrieved the description from the remote registry and is using the retrieved description file to use the web service provided by said computer based on by performing a plurality of interactions described in the description file,

said plurality of interactions describing at least one of a message type to be received and a message type to be transmitted to said another computer to facilitate said web service,

wherein the message type to be received or the message type to be transmitted includes attributes describing data in a message that corresponds to the message type.

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20. (Original) The computer of claim 19, wherein said description file includes at least one transition describing at least one sequence for executing one or more of said plurality of interactions.

21. (Canceled).

22. (Previously Presented) The computer of claim 20, wherein said another computer communicating with the computer comprising the web service based on the plurality of interactions described in the description file retrieves said description file including said at least one transition and transmits and receives messages to said computer based on said description file including said at least one transition to utilize said web service provided by said computer.

23-24. (Canceled).

25. (Previously Presented) The computer of claim 19, wherein each of said plurality of description files are identified by a URN.

26. (Previously Presented) The computer of claim 19, wherein said message type to be received or transmitted comprises a description of an XML document.

27. (Canceled).

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28. (Previously Presented) The computer of claim 14, wherein said conversation controller is operable to generate an error message in response to the document not being the instance of the document type.

29. (Previously Presented) The computer of claim 28, wherein an interaction error message in response to the document not being the instance of the document type is provided in the description file.